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09/478,198	01/05/2000	Yoshiyasu Inoue	Q57471	1379

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EXAMINER

SANTIAGO, MARICELI

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 07/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

09/478,198

Applicant(s)

INOUE, YOSHIYASU

Examiner

Mariceli Santiago

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Response to Amendment

The Amendment, filed on April 22, 2003, has been entered and acknowledged by the Examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-82 are rejected under 35 U.S.C. 102(e) as being anticipated by Inoue et al. (US 6,321,898).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Inoue discloses a method of fabricating a display panel, comprising a first step and a second step, said first step is carried out immediately before said second step, said second step taking longer time to be carried out per a display panel than that of said first

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step, the number of display panels to be processed in said second step being greater than the number of display panels to be processed in said first step (Column 13, lines 48-56).

Regarding claim 2, Inoue discloses a method wherein said second step includes a relocation step of relocating display panels from a first cassette used in said first step to a second cassette used in said second step in a greater number than the number of display panels having been processed in said first step (Column 13, lines 48-56).

Regarding claim 3, Inoue discloses a method (Column 4, lines 30-48) wherein said relocation step includes the steps of:

(a) upwardly taking a display panel out of said first cassette in which display panels are stored, with said display panel being supported at upper and lower edges thereof;

(b) supporting said display panel taken out of said first cassette, at lower and side edges thereof;

(c) laterally transferring said display panel from a position above said first cassette to a position above said second cassette; and

(d) supporting said display panel at upper and side edges thereof and lowering said display panel into said second cassette.

Regarding claim 4, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at an upper edge of said display panel when said display panel is supported at said upper edge thereof (Column 5, lines 16-23).

Regarding claim 5, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at a side edge of said display panel when said display panel is supported at said side edge thereof (Column 5, lines 16-23).

Regarding claim 6, Inoue discloses a method wherein said step (a) further includes the steps of:

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(a1) transferring said first cassette including display panels, into a first station; (a2) taking said display panels out of said first cassette in said first station; and (a3) transferring said first cassette out of said first station (Column 9, lines 5-23); and

wherein said step (d) further includes the steps of: (d1) transferring said second cassette including no display panels into a second station; (d2) introducing display panels into said second cassette; and (d3) transferring said second cassette out of said second station (Column 9, lines.

Regarding claim 7, Inoue discloses a method wherein said first cassette is transferred in a first direction in a first stream line and said second cassette is transferred in a second direction in a second stream line, said first and second directions are opposite to each other, said first and second stream lines being spaced away from each other and being in parallel with each other (Column 9, lines 24-45).

Regarding claim 8, Inoue discloses a method (Column 9, lines 24-45) further comprising a step (e) of rotating said second cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (d).

Regarding claim 9, Inoue discloses a method (Column 9, lines 24-45) further comprising a step (e) of rotating said first cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (a).

Regarding claim 10, Inoue discloses a method wherein said first and second cassettes have the same size.

Regarding claim 11, Inoue discloses a method wherein each of said first and second cassettes is comprised of (a) a pair of frames; (b) a plurality of shafts extending between said frames; and (c) a pair of panel-supporting plates, at least one of said panel-supporting plates

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being slidable along said shafts and being able to be fixed at any position (Column 4, lines 19-24).

Regarding claim 12, Inoue discloses a method wherein said second step is a step of introducing liquid crystal into a space formed between two substrates.

Regarding claim 13, Inoue discloses a method of fabricating a display panel, comprising a first step and a second step which is to be carried out immediately after said first step, said first step taking a longer time to be carried out per a display panel than that of said second step, the number of display panels to be processed in said first step being greater than the number of display panels to be processed in said second step (Column 13, lines 48-56).

Regarding claim 14, Inoue discloses a method wherein said first step includes the relocation step of relocating display panels from a first cassette used in said first step to a second cassette used in said second step in the smaller number than the number of display panels having been processed in said first step (Column 13, lines 48-56).

Regarding claim 15, Inoue discloses a method (Column 4, lines 30-48) wherein said relocation step includes the steps of:

(a) upwardly taking a display panel out of said first cassette in which display panels are stored, with said display panel being supported at upper and lower edges thereof;

(b) supporting said display panel taken out of said first cassette, at lower and side edges thereof;

(c) laterally transferring said display panel from a position above said first cassette to a position above said second cassette; and

(d) supporting said display panel at upper and side edges thereof and lowering said display panel into said second cassette.

Regarding claim 16, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at an upper edge of said display panel when said display panel is supported at said upper edge thereof.

Regarding claim 17, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at a side edge of said display panel when said display panel is supported at said side edge thereof.

Regarding claim 18, Inoue discloses a method wherein said step (a) further includes the steps of:

(a1) transferring said first cassette including display panels, into a first station; (a2) taking said display panels out of said first cassette in said first station; and (a3) transferring said first cassette out of said first station; and

wherein said step (d) further includes the steps of: (d1) transferring said second cassette including no display panels into a second station; (d2) introducing display panels into said second cassette; and (d3) transferring said second cassette out of said second station.

Regarding claim 19, Inoue discloses a method wherein said first cassette is transferred in a first, direction in a first stream line and said second cassette is transferred in a second direction in a second stream line, said first and second directions are opposite to each other, said first and second stream lines being spaced away from each other and being in parallel with each other.

Regarding claim 20, Inoue discloses a method further comprising a step (e) of rotating said second cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (d).

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Regarding claim 21, Inoue discloses a method further comprising a step (e) of rotating said first cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (a).

Regarding claim 22, Inoue discloses a method wherein said first and second cassettes have the same size.

Regarding claim 23, Inoue discloses a method wherein each of said first and second cassettes is comprised of: (a) a pair of frames; (b) a plurality of shafts extending between said frames; and (c) a pair of panel-supporting plates, at least one of said panel-supporting plates being slidable along said shafts and being able to be fixed at any position (Column 4, lines 19-24).

Regarding claim 24, Inoue discloses a method wherein said first step is a step of introducing liquid crystal into a space formed between two substrates.

Regarding claim 25, Inoue discloses a method of fabricating a display panel, comprising a first step, a second step which is to be carried out immediately after said first step, and a third step which is to be carried out immediately after said second step, said second step taking a longer time to be carried out per a display panel than those of said first and second steps, the number of display panels to be processed in said second step being greater than both the number of display panels to be processed in said first step and the number of display panels to be processed in said third step (Column 13, lines 48-56).

Regarding claim 26, Inoue discloses a method wherein said second step includes a first relocation step of relocating display panels from a first cassette used in said first step to a second cassette used in said second step in a greater number than the number of display panels having been processed in said first step, and a second relocation step of relocating display panels from said second cassette into a third cassette used in said third step in the

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smaller number than the number of display panels having been processed in said second step (Column 13, lines 48-56).

Regarding claim 27, Inoue discloses a method (Column 4, lines 30-48) wherein each of said first and second relocation steps includes the steps of:

(a) upwardly taking a display panel out of said first cassette in which display panels are stored, with said display panel being supported at upper and lower edges thereof;

(b) supporting said display panel taken out of said first cassette, at lower and side edges thereof;

(c) laterally transferring said display panel from a position above said first cassette to a position above said second cassette; and

(d) supporting said display panel at upper and side edges thereof and lowering said display panel into said second cassette.

Regarding claim 28, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at an upper edge of said display panel when said display panel is supported at said upper edge thereof.

Regarding claim 29, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at a side edge of said display panel when said display panel is supported at said side edge thereof.

Regarding claim 30, Inoue discloses a method wherein said step (a) further includes the steps of: (a1) transferring said first cassette including display panels, into a first station; (a2) taking said display panels out of said first cassette in said first station; and (a3) transferring said first cassette out of said first station; and

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wherein said step (d) further includes the steps of: (d1) transferring said second cassette including no display panels into a second station; (d2) introducing display panels into said second cassette; and (d3) transferring said second cassette out of said second station.

Regarding claim 31, Inoue discloses a method wherein said first cassette is transferred in a first direction in a first stream line and said second cassette is transferred in a second direction in a second stream line, said first and second directions are opposite to each other, said first and second stream lines being spaced away from each other and being in parallel with each other.

Regarding claim 32, Inoue discloses a method further comprising a step (e) of rotating said second cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (d).

Regarding claim 33, Inoue discloses a method further comprising a step (e) of rotating said first cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (a).

Regarding claim 34, Inoue discloses a method wherein said first and second cassettes have the same size.

Regarding claim 35, Inoue discloses a method wherein each of said first and second cassettes is comprised of: (a) a pair of frames; (b) a plurality of shafts extending between said frame; and (c) a pair of panel-supporting plates, at least one of said panel-supporting plates being slidable along said shafts and being able to be fixed at any position (Column 4, lines 19-24).

Regarding claim 36, Inoue discloses a method wherein said second step is a step of introducing liquid crystal into a space formed between two substrates.

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Regarding claim 37, Inoue discloses a method of fabricating a display panel, comprising a first step and a second step, said first step carried out immediately before said second step, said second step taking a longer time to be carried out per a display panel than that of said first step, the number of display panels to be processed in said second step being greater than the number of display panels having been processed in said first step.

Regarding claim 38, Inoue discloses a method wherein said second step includes a relocation step of relocating display panels from a first cassette used in said first step to a second cassette used in said second step in a greater number than the number of display panels having been processed in said first step.

Regarding claim 39, Inoue discloses a method (Column 4, lines 30-48) wherein said relocation step includes the steps of:

(a) upwardly taking a display panel out of said first cassette in which display panels are stored, with said display panel being supported at upper and lower edges thereof;

(b) supporting said display panel taken out of said first cassette, at lower and side edges thereof;

(c) laterally transferring said display panel from a position above said first cassette to a position above said second cassette; and

(d) supporting said display panel at upper and side edges thereof and lowering said display panel into said second cassette.

Regarding claim 40, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at an upper edge of said display panel when said display panel is supported at said upper edge thereof.

Regarding claim 41, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at a side edge of said display panel when said display panel is supported at said side edge thereof.

Regarding claim 42, Inoue discloses a method wherein said step (a) further includes the steps of: (a1) transferring said first cassette including display panels, into a first station; (a2) taking said display panels out of said first cassette in said first station; and (a3) transferring said first cassette out of said first station; and

wherein said step (d) further includes the steps of: (d1) transferring said second cassette including no display panels into a second station; (d2) introducing display panels into said second cassette; and (d3) transferring said second cassette out of said second station.

Regarding claim 43, Inoue discloses a method wherein said first cassette is transferred in a first direction in a first stream line and said second cassette is transferred in a second direction in a second stream line, said first and second directions are opposite to each other, said first and second stream lines being spaced away from each other and being in parallel with each other.

Regarding claim 44, Inoue discloses a method further comprising a step (e) of rotating said second cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (d).

Regarding claim 45, Inoue discloses a method further comprising a step (e) of rotating said first cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (a).

Regarding claim 46, Inoue discloses a method wherein said first and second cassettes have the same size.

Regarding claim 47, Inoue discloses a method wherein each of said first and second cassettes is comprised of (a) a pair of frames; (b) a plurality of shafts extending between said frame; and (c) a pair of panel-supporting plates, at least one of said panel-supporting plates being slidable along said shafts and being able to be fixed at any position (Column 4, lines 19-24).

Regarding claim 48, Inoue discloses a method wherein said second step is a step of introducing liquid crystal into a space formed between two substrates.

Regarding claim 49, Inoue discloses a method of fabricating a display panel, comprising a first step and a second step which is to be carried out immediately after said first step, said first step taking; a longer time to be carried out per a display panel than that of said second step, the number of display panels to be processed in said first step being greater than the number of display panels to be introduced into said second step (Column 13, lines 48-56).

Regarding claim 50, Inoue discloses a method wherein said first step includes the relocation step of relocating display panels from a first cassette used in said first step to a second cassette used in said second step in the smaller number than the number of display panels having been processed in said first step.

Regarding claim 51, Inoue discloses a method (Column 4, lines 30-48) wherein said relocation step includes the steps of:

- (a) upwardly taking a display panel out of said first cassette in which display panels are stored, with said display panel being supported at upper and lower edges thereof;

- (b) supporting said display panel taken out of said first cassette, at lower and side edges thereof;

- (c) laterally transferring said display panel from a position above said first cassette to a position above said second cassette; and

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(d) supporting said display panel at upper and side edges thereof and lowering said display panel into said second cassette.

Regarding claim 52, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at an upper edge of said display panel when said display panel is supported at said upper edge thereof.

Regarding claim 53, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at a side edge of said display panel when said display panel is supported at said side edge thereof.

Regarding claim 54, Inoue discloses a method wherein said step (a) further includes the steps of:

(a1) transferring said first cassette including display panels, into a first station; (a2) taking said display panels out of said first cassette in said first station; and (a3) transferring said first cassette out of said first station; and

wherein said step (d) further includes the steps of: (d1) transferring said second cassette including no display panels into a second station; (d2) introducing display panels into said second cassette; and (d3) transferring said second cassette out of said second station.

Regarding claim 55, Inoue discloses a method wherein said first cassette is transferred in a first direction in a first stream line and said second cassette is transferred in a second direction in a second stream line, said first and second directions are opposite to each other, said first and second stream lines being spaced away from each other and being in parallel with each other.

Regarding claim 56, Inoue discloses a method further comprising a step (e) of rotating said second cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (d).

Regarding claim 57, Inoue discloses a method further comprising a step (e) of rotating said first cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (a).

Regarding claim 58, Inoue discloses a method wherein said first and second cassettes have the same size.

Regarding claim 59, Inoue discloses a method wherein each of said first and second cassettes is comprised of: (a) a pair of frames; (b) a plurality of shafts extending between said frame; and (c) a pair of panel-supporting plates, at least one of said panel-supporting plates being slidable along said shafts and being able to be fixed at any position (Column 4, lines 19-24).

Regarding claim 60, Inoue discloses a method wherein said first step is a step of introducing liquid crystal into a space formed between two substrates.

Regarding claim 61, Inoue discloses a method of fabricating a display panel, comprising a first step, a second step which is to be carried out immediately after said first step, and a third step which is to be carried out immediately after said second step, said second step taking a longer time to be carried out per a display panel than those of said first and second steps, the number of display panels to be processed in said second step being greater than both the number of display panels having been processed in said first step and the number of display panels to be introduced into said third step (Column 13, lines 48-56).

Regarding claim 62, Inoue discloses a method wherein said second step includes a first relocation step of relocating display panels from a first cassette used in said first step to a second cassette used in said second step in a greater number than the number of display panels having been processed in said first step, and a second relocation step of relocating

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display panels from said second cassette into a third cassette used in said third step in the smaller number than the number of display panels having been processed in said second step.

Regarding claim 63, Inoue discloses a method (Column 4, lines 30-48) wherein each of said first and second relocation steps includes the steps of:

(a) upwardly taking a display panel out of said first cassette in which display panels are stored, with said display panel being supported at upper and lower edges thereof;

(b) supporting said display panel taken out of said first cassette, at lower and side edges thereof;

(c) laterally transferring said display panel from a position above said first cassette to a position above said second cassette; and

(d) supporting said display panel at upper and side edges thereof and lowering said display panel into said second cassette.

Regarding claim 64, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at an upper edge of said display panel when said display panel is supported at said upper edge thereof.

Regarding claim 65, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at a side edge of said display panel when said display panel is supported at said side edge thereof.

Regarding claim 66, Inoue discloses a method wherein said step (a) further includes the steps of:

(a1) transferring said first cassette including display panels, into a first station; (a2) taking said display panels out of said first cassette in said first station; and (a3) transferring said first cassette out of said first station; and

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wherein said step (d) further includes the steps of: (d1) transferring said second cassette including no display panels into a second station; (d2) introducing display panels into said second cassette; and (d3) transferring said second cassette out of said second station.

Regarding claim 67, Inoue discloses a method wherein said first cassette is transferred in a first direction in a first stream line and said second cassette is transferred in a second direction in a second stream line, said first and second directions are opposite to each other, said first and second stream lines being spaced away from each other and being in parallel with each other.

Regarding claim 68, Inoue discloses a method further comprising a step (e) of rotating said second cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (d).

Regarding claim 69, Inoue discloses a method further comprising a step (e) of rotating said first cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (a).

Regarding claim 70, Inoue discloses a method wherein said first and second cassettes have the same size.

Regarding claim 71, Inoue discloses a method wherein each of said first and second cassettes is comprised of: (a) a pair of frames; (b) a plurality of shafts extending between said frames; and (c) a pair of panel-supporting plates, at least one of said panel-supporting plates being slidable along said shafts and being able to be fixed at any position (Column 4, lines 19-24).

Regarding claim 72, Inoue discloses a method wherein said first step is a step of introducing liquid crystal into a space formed between two substrates.

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Regarding claim 73, Inoue discloses a method (Column 4, lines 30-48) of relocating display panels comprising the steps of

(a) upwardly taking a display panel out of said first cassette in which display panels are stored, with said display panel being supported at upper and lower edges thereof;

(b) supporting said display panel taken out of said first cassette, at lower and side edges thereof;

(c) laterally transferring said display panel from a position above said first cassette to a position above said second cassette; and

(d) supporting said display panel at upper and side edges thereof and lowering said display panel into said second cassette.

Regarding claim 74, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at an upper edge of said display panel when said display panel is supported at said upper edge thereof.

Regarding claim 75, Inoue discloses a method wherein said step (a) further includes the step of compensating for a pitch at a side edge of said display panel when said display panel is supported at said side edge thereof.

Regarding claim 76, Inoue discloses a method wherein said step (a) further includes the steps of:

(a1) transferring said first cassette including display panels, into a first station; (a2) taking said display panels out of said first cassette in said first station; and (a3) transferring said first cassette out of said first station; and

wherein said step (d) further includes the steps of: (d1) transferring said second cassette including no display panels into a second station; (d2) introducing display panels into said second cassette; and (d3) transferring said second cassette out of said second station.

Regarding claim 77, Inoue discloses a method wherein said first cassette is transferred in a first direction in a first stream line and said second cassette is transferred in a second direction in a second stream line, said first and second directions are opposite to each other, said first and second stream lines being spaced away from each other and being in parallel with each other.

Regarding claim 78, Inoue discloses a method further comprising a step (e) of rotating said second cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (d).

Regarding claim 79, Inoue discloses a method further comprising the step (e) of rotating said first cassette in a horizontal plane by 90 degrees, said step (e) being to be carried out before or after said step (a).

Regarding claim 80, Inoue discloses a method wherein said first and second cassettes have the same size.

Regarding claim 81, Inoue discloses a method wherein each of said first and second cassettes is comprised of: (a) a pair of frames; (b) a plurality of shafts extending between said frame; and (c) a pair of panel-supporting plates, at least one of said panel-supporting plates being slidable along said shafts and being able to be fixed at any position (Column 4, lines 19-24).

Regarding claim 82, Inoue discloses a method wherein said display panel is a liquid crystal display panel.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 12-14, 24-26, 36-38, 48-50, 60-62 and 72 are rejected under 35 U.S.C.

103(a) as being unpatentable over von Gutfeld et al. (US 6,181,408).

Regarding claims 1 and 2, von Gutfeld discloses a method of fabricating a display panel, comprising a first step and a second step, said first step is carried out immediately before said second step, said second step taking longer time to be carried out per a display panel than that of said first step, said second step includes a relocation step of relocating display panels from a first cassette used in said first step to a second cassette used in said second step, the second step comprising a plurality of display devices. Von Gutfeld is silent regarding the limitation of the number of display panels to be processed in the second step being greater than the number of displays panels to be processed in the first step. However, it would be considered to be a matter of design choice to provide the number of display panels to be processed in the second step greater than for the first step, in order to maintain a continuous production without shutting down one operation for an excessive period of time, for such reason, merely increasing the number of displays panels during the longest manufacturing step would be an obvious method to achieve this result.

Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to provide a greater amount of display devices in the second step than in the first step in order to maintain a continuous production without shutting down one operation for an excessive period of time, for such reason, merely increasing the number of displays panels during the longest manufacturing step would be an obvious method to achieve this result.

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Regarding claims 37 and 38, claims 37 and 38 are rejected for the same reasons stated above in the rejection of claims 1 and 2.

Regarding claims 13 and 14, von Gutfeld discloses a method of fabricating a display panel, comprising a first step and a second step which is to be carried out immediately after said first step, said first step taking a longer time to be carried out per a display panel than that of said second step, said first step includes the relocation step of relocating display panels from a first cassette used in said first step to a second cassette used in said second step, the first step comprising a plurality of display devices. Von Gutfeld is silent regarding the limitation of the number of display panels to be processed in the first step being greater than the number of displays panels to be processed in the second step. However, it would be considered to be a matter of design choice to provide the number of display panels to be processed in the first step greater than for the second step, in order to maintain a continuous production without shutting down one operation for an excessive period of time, for such reason, merely increasing the number of displays panels during the longest manufacturing step would be an obvious method to achieve this result.

Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to provide a greater amount of display devices in the first step than in the second step in order to maintain a continuous production without shutting down one operation for an excessive period of time, for such reason, merely increasing the number of displays panels during the longest manufacturing step would be an obvious method to achieve this result.

Regarding claims 49 and 50, claims 49 and 50 are rejected for the same reasons stated above in the rejection of claims 13 and 14.

Regarding claims 25 and 26, von Gutfeld discloses a method of fabricating a display panel, comprising a first step, a second step which is to be carried out immediately after said first step, and a third step which is to be carried out immediately after said second step, said second step taking a longer time to be carried out per a display panel than those of said first and second steps, said second step includes a first relocation step of relocating display panels from a first cassette used in said first step to a second cassette used in said second step in a greater number than the number of display panels having been processed in said first step, and a second relocation step of relocating display panels from said second cassette into a third cassette, and the first step comprising a plurality of display devices. Von Gutfeld is silent regarding the limitation of the number of display panels to be processed in the second step being greater than the number of displays panels to be processed in the first and third steps. However, it would be considered to be a matter of design choice to provide the number of display panels to be processed in the second step greater than for the first and third steps, in order to maintain a continuous production without shutting down one operation for an excessive period of time, for such reason, merely increasing the number of displays panels during the longest manufacturing step would be an obvious method to achieve this result.

Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to provide a greater amount of display devices in the second step than in the first and third steps in order to maintain a continuous production without shutting down one operation for an excessive period of time, for such reason, merely increasing the number of displays panels during the longest manufacturing step would be an obvious method to achieve this result.

Regarding claims 61 and 62, claims 61 and 62 are rejected for the same reasons stated above in the rejection of claims 25 and 26.

Regarding claims 12, 24, 36, 48, 60 and 72, von Gutfeld discloses a method wherein the second step is a step of introducing liquid crystal into a space formed between two substrates.

Response to Arguments

Applicant's arguments filed April 22, 2003 have been fully considered but they are not persuasive.

In response to applicant's arguments the Examiner notes that Gutfeld teaches a method of manufacturing a display panel comprising several steps, wherein the step of injecting liquid crystal into the display panel takes a longer time interval compared with the other manufacturing steps, accordingly, such step is a major cause of limiting the throughput of panel production. While Gutfeld is silent in regards to the number of panels present during the injection step, the Examiner notes that in order to maintain a continuous production without shutting down one operation for an excessive period of time one of ordinary skills in the art would conclude that increasing the number of displays panels during the longest manufacturing step would be a obvious choice in order to achieve a continuous production.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariceli Santiago whose telephone number is (703) 305-1083. The examiner can normally be reached on Monday-Friday from 7:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel, can be reached on (703) 305-4794. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7382. Additionally, the following fax phone numbers can be used during the prosecution of this application (703)

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872-9318 (for response before a Final Action) and (703) 872-9319 (for response after a Final Action).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

ms 6/30/03
Mariceli Santiago
Patent Examiner
Art Unit 2879

Kenneth J. Ramsey
KENNETH J. RAMSEY
PRIMARY EXAMINER